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BOARD OF PUBLIC WORKS OF THE COUNTY OF KENT

1500 Scribner Ave., N.W. Grand Rapids, Michigan 49504
Telephone: (616) 774-3694

October 3, 1985

Ms. Bonnie L. White
Water Quality Specialist
Groundwater Quality Division
Michigan Department of Natural Resources
350 Ottawa Avenue, N.W.
Grand Rapids, MI 49503

RE: North Kent Landfill -- Status Report

Dear Ms. White:

In reviewing the communication file, I have noticed that a number of phone conversations, but no written communications, have taken place in recent months. The following is a written summary of the topics recently discussed in our phone conversations:

Spring Well Monitoring Data

In June of this year the DPW and the DNR split monitoring well water samples from the above-mentioned site. The results received at this office on August 22, 1985, show a very good match between the DPW lab and the DNR lab analyses of these duplicate samples. Also, in June the DNR sampled the sludge cake from the leachate treatment trailer facility. This sample was subjected to an EP Toxicity test by the DNR and was shown to be non-hazardous.

Leachate Collection System Bottom Grates Installation

Beginning on July 15 and ending on August 3 the grate system with airlines was successfully installed in 14 of the 15 intended manholes. However, technical problems in Manhole #8 precluded installation in that manhole. Further work will be undertaken to complete the installation. In conjunction with this project a considerable amount of leachate collection system cleaning was conducted. A blockage between the #3 and #4 manhole was removed and the resultant leachate backup was eliminated.

Leachate Pretreatment

Early this summer one additional full-time operator was added at the leachate pretreatment trailer. Also, the operating hours of

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that facility were increased to approximately 70 hours per week. This staffing increase, along with minor improvements to the process, has increased the output to over 70,000 gallons per week. In early September a major surface runoff in-flow to the leachate collection system was eliminated, thereby, reducing leachate generation after rainfalls.

Hydrogeologic Study

Steady progress has been made this summer on the Hydrogeologic study although it has proceeded somewhat slower than we would have preferred or anticipated. Phase II Group One work consisting of gamma ray logging and airline installations was completed on July 22, 1985. The first item of the Phase II Group Two work (the Earth Resistivity Study) was performed twice due to an operational problem during the initial study. The results of the second study were received on August 12, 1985. This data was then used in preparation of the drilling, which commenced on August 16 and was substantially complete on September 5. One deep well to be installed at the south side of the site had to be subcontracted out and that work was started on September 26 and is continuing at this time. Draft boring log data for the shallow wells were received on September 13, however, at this time we have not yet received the final well and boring log data from the driller.

During the September quarterly well monitoring, all of the newly-constructed wells were sampled. Upon receipt of the water quantity and water quality data obtained, we will propose a new monitoring program for the site.

Upgrading of Computer Processing Facilities

In the Phase I Hydrogeologic Report, it was suggested that more advanced computer processing facilities would be in order. As a result, the Department has obtained an advanced relational database program with statistical processing capabilities for use on the new IBM computers. The program itself was received August 12 with data input being initiated on September 16. The process of entering and revising data is continuing at this time.

Site Development Towards Final Closure

At this time, we wish to point out that we are considerably ahead of schedule (as proposed in the August 31 letter to Roger Przybysz, Part IV) in bringing this site to its proposed final

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grades. At present, the eastern 45 percent of the licensed fill area is either at finished garbage grade awaiting clay cap, or is completely finished with clay cap. Orders have been given to the earthwork contractor to complete the installation of clay cap on this portion of the site as soon as possible. Therefore, as weather conditions permit, we expect the eastern 45 percent of the site to be capped prior to January 1, 1986.

On the western half of the site, the Wolverine Sludge Disposal area is no longer accepting waste and is in the process of being capped at this time. As soon as this cap is completed, the low area east of the sludge disposal site will be filled with refuse to avoid ponding conditions in that area.

As noted above, the leachate collection system bottom grate installation is now complete. Therefore, we are prepared to initiate refuse placement along the leachate collection system manholes. The work will be conducted this winter, moving from the northern to the southern end of the site. Thereby eliminating the surface water ponding associated with this area.

Regarding cover and its relation to surface runoff, we point out that areas with inadequate cover allow rainwaters to infiltrate on contact, and do not generate runoff to any significant extent. This I have seen on site over and over again. Therefore, only areas that have water-tight clay cover produce the surface runoff found on site.

MDNR Site Evaluation Report Dated September 18, 1985

We appreciate the comments in the report and its attached cover letter pointing out the low levels in the leachate ponds, the lack of noticeable odor, and the generally acceptable operation of the site. We feel this is testimony to the considerable effort made by Department staff during the last 12 months to improve conditions at this facility. In regards to the areas you list as in non-compliance, we do not agree that the runoff is contaminated. However, we are proceeding to eliminate this ponding area, as you noted in your report, due to the fact that the ponding causes considerable operational problems. The two areas that you noted with inadequate intermediate cover, we do agree, require additional cover to bring them to intermediate standard. Both of those areas were worked within days prior to your visit and we expect to have them covered to intermediate level within the week.

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If you have any questions or comments, please do not hesitate to contact this office.

Very truly yours,

Kent County Department of Public Works

Jerry J. Powell, P.E. Civil Engineer

JJP:kn

cc: Gary Marks, Env. Enf. Beth Bandstra, K.C.B.P.W.

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350 Ottawa Avenue, N. W. Grand Rapids, Michigan 49503

September 24, 1985

Mr. Jerry Powell Kent County Department of Public Works 1500 Scribner, N.W. Grand Rapids, MI 49504

Re: North Kent (10 Mile) Landfill

Kent County

Dear Mr. Powell:

Attached you will find the evaluation report from my September 18, 1985 quarterly inspection at the North Kent Landfill (10 Mile).

The non-compliance items identified under the surface water drainage, leachate management and cover categories were interrelated for the most part. Precipitation runoff accumulating in the low area near the L2 manhole is being managed as uncontaminated runoff. According the Mr. Lund, the site foreman, the liquid is pumped up and through a culvert which underlies the south berm road. The runoff is considered uncontaminated since most of the area it drains from has "intermediate cover".

From my observations, the liquid should be managed as leachate, not uncontaminated storm water. The low area receives runoff from a portion of the active south slope of the east half of the landfill. Further, the cover over the inactive west (center) facing slope of the east half which also drains to the low area is inadequate as intermediate cover. Exposed wastes were readily visible protruding through the cover soils. For these reasons, the practice of pumping these liquids out through the berm and into the ground surface is unaccceptable and must be discontinued immediately. Other provisions must be made to assure that these liquids are managed properly.

As indicated in the report, I also noted standing water in three other locations in or on the fill area. All three were being managed as leachate. The one identified as #3 on the sketch was very close to overflowing onto the haul road. Every effort should be made to minimize standing water on the fill and to prevent the accidental release of contaminated waters.